

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	161	VSAM and UNIX	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 14:51
L2	890	"OS/390"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 14:51
L3	21	1 and 2	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 14:51
L4	5	3 and bypass\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 14:52
L5	5	4 and port\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 15:44
L7	447	"shell interface"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 15:55
L8	2	7 same bypass\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 15:45
L9	4	((("6754734") or ("6877045"))).PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/08 15:54
L10	64	"shell interface".clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 15:56

L11	4709	"access command"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 15:55
L12	697	"access command".clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 15:55
L13	0	10 and 12	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 15:55
L14	697	"access commands".clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 15:56
L15	59599	shell.clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 15:56
L16	2	14 and 15	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 16:00
L17	0	16 and queue.clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 16:00
L18	0	16 and queue\$3.clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 16:00
L19	7258	(707/100,101,200).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/08 16:01
L20	1361	(710/5,6,24).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/08 16:01

L21	8612	19 or 20	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 16:02
L22	11	21 and 7	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 16:12
L23	2	22 and 11	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 16:02
L24	2	22 and queue\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 16:29
L25	1586	(711/112).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/08 16:29
L26	1068	(719/328).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/08 16:29
L27	2652	25 or 26	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 16:30
L28	3	27 and 7	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 16:31

L29	138	27 and 11	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 16:30
L30	54	29 and queue\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 16:32
L31	11	30 and "operating system"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 16:34
L32	1	31 and shell	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 16:34



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James M. Butler, A. Yavuz Oruc

January 1990 **Proceedings of the 1990 ACM annual conference on Cooperation**

Publisher: ACM Press

Full text available: [pdf\(770.21 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

There are many areas of investigation where it is necessary to model the structure and behavior of distributed programs. Many models exist, though most tend to focus on some particular aspect of program behavior. For many problems, such as task mapping in real-world systems, it is necessary to coalesce all major features of distributed program structure and behavior into a single model. This paper presents a model called a Program Structure and Behavior graph which provides a basis for simu ...

2 [Effective use of Cray supercomputers](#)



W. T. C. Kramer, J. M. Crower

August 1989 **Proceedings of the 1989 ACM/IEEE conference on Supercomputing**

Publisher: ACM Press

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3 [A novel application development environment for large-scale scientific computations](#)



X. Shen, W. Liao, A. Choudhary, G. Memik, M. Kandemir, S. More, G. Thiruvathukal, A. Singh

May 2000 **Proceedings of the 14th international conference on Supercomputing**

Publisher: ACM Press

Full text available: [pdf\(1.15 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Our results demonstrate that our novel application development environment provides both ease-of-use and high performance for large-scale, I/O-intensive scientific applications.

4 [Bochs: A Portable PC Emulator for Unix/X](#)



Kevin P. Lawton

September 1996 **Linux Journal**

Publisher: Specialized Systems Consultants, Inc.

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5

[UIO: a uniform I/O system interface for distributed systems](#)





David R. Cheriton

January 1987 **ACM Transactions on Computer Systems (TOCS)**, Volume 5 Issue 1

Publisher: ACM Press

Full text available:  [pdf\(3.20 MB\)](#)Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#), [review](#)

A uniform I/O interface allows programs to be written relatively independently of specific I/O services and yet work with a wide variety of the I/O services available in a distributed environment. Ideally, the interface provides this uniform access without excessive complexity in the interface or loss of performance. However, a uniform interface does not arise from careful design of individual system interfaces alone; it requires explicit definition. In this paper, the UIO (unifo ...

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UIO: A Uniform I/O System Interface for Distributed Systems

DAVID R. CHERITON
Stanford University

A uniform I/O interface allows programs to be written relatively independently of specific I/O services and yet work with a wide variety of the I/O services available in a distributed environment. Ideally, the interface provides this uniform access without excessive complexity in the interface or loss of performance. However, a uniform interface does not arise from careful design of individual system interfaces alone; it requires explicit definition.

In this paper, the UIO (uniform I/O) system interface that has been used for the past five years in the V distributed operating system is described, with the focus on the key design issues. This interface provides several extensions beyond the I/O interface of UNIX¹, including support for record I/O, locking, atomic transactions, and replication, as well as attributes that indicate whether optional semantics and operations are available. Experience in using and implementing this interface with a variety of different I/O services is described, along with the performance of both local and network I/O. It is concluded that the UIO interface provides a uniform I/O system interface with significant functionality, wide applicability, and no significant performance penalty.

Categories and Subject Descriptors: D.4.4 [Operating Systems]: Communications Management—input/output

General Terms: Design, Experimentation, Performance, Standardization

Additional Key Words and Phrases: Byte stream, distributed system, files input/output, interface, interprocess communication, remote procedure call

1. INTRODUCTION

A *uniform I/O interface* specifies the syntax and semantics for a set of I/O operations that are provided in a sufficiently similar form across the I/O services of an operating system such that programs can be written to be relatively independent of the data sources and sinks to which their I/O operations are eventually bound. A familiar example of such an I/O interface is the UNIX I/O interface [29]¹ consisting of the system calls open, read, write, seek, close, and

¹ UNIX is a trademark of AT&T Bell Laboratories.

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